



"Wilkes, Sam" <sam.wilkes@tetratech.com>

05/29/2008 10:26 AM

To Kathryn Hernandez/EPR/R8/USEPA/US@EPA, "Ludwig, Jon" <jon.ludwig@tetratech.com>

cc "Craig, John" <john.craig@tetratech.com>

bcc

Subject RE: Silver Creek Recon and Sampling

Hi Kathy,

The samples will be used to calibrate the chemical speciation model which will encompass the entire upper portion of the watershed as well as the lower silver creek site to I-80. The sampling points are placed at critical modeling locations where the stream diverts, bracketing tailings piles or other sources, where tributary streams enter into the main Silver Creek Channel, or where known point sources enter the main Silver Creek channel.

Of the proposed 43 surface water samples, 16 (about 1/3 of the total proposed samples) are within the lower silver creek site. In addition, all 7 ground water samples will be collected from piezometers located in the lower silver creek site. To adequately represent the upper portions of the watershed, we need to sample critical areas. During the site reconnaissance the first three days in the field, I may be able to consolidate or totally scrap some of the upper watershed samples. The preliminary placement is based solely on my interpretation of the 24K Topo, aerials, and the USGS NHD stream reach GIS file. Many of the points were selected to be conservative, from the modeling point of view, to capture any possible sources or inputs to Silver Creek so they can be represented in the model. Once field checked, those locations may be moved or not deemed necessary. However, without sampling at critical locations in the upper part of the watershed, we would not be able to conduct a true representation of the watershed for modeling purposes. This approach will allow full characterization and implementation on a true watershed basis approach instead of a limited site by site individual characterization.

Another concern of ours is that if the surface water entering the lower silver creek site is already contaminated, then our model will only be useful in determining cleanup alternatives in the lower silver creek site. The way we are currently proceeding will allow us to suggest areas where reductions would also need to be made to meet WQ standards in the upper part of the watershed and evaluate remedial alternatives throughout the entire watershed. This approach is basically much more comprehensive and is truly a complete watershed approach in nature.

If you have any other questions or concerns, please let me know.

Thanks Sam

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----Original Message----

From: Hernandez.Kathryn@epamail.epa.gov [mailto:Hernandez.Kathryn@epamail.epa.gov] Sent: Thursday, May 29, 2008 11:58 AM

To: Ludwig, Jon

Cc: Craig, John; Wilkes, Sam

Subject: Re: Silver Creek Recon and Sampling

Kerry feels like there is little sampling in Lower Silver Creek this event. Can you clarify for me how we plan to use this data.

Kathy

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